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| 32299 7590 07/08/2010 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,639

Applicant(s)

BONNER, MICHAEL R.

Examiner

Leonard R. Leo

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-18 and 20-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

The amendment filed on March 9, 2010 has been entered. Claims 1-18 and 20-33 are pending.

Claim Objections

Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The claim limitations of claim 8 are present in claim 1, third paragraph.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11, 13-16, 25 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: a second flexible elongated temperature control conduit. The claim recites “the outwardly oriented surface of the cover in radial spaced relationship to the first conduit” in lines 11-12. As disclosed, the cover is flexible with no structural reinforcement and is releasable by a fastener. Thus, a structure must be present to provide the “radial spaced relationship” as claimed.

Claim 25 recites the limitation "said cover conduit" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 30 recites the limitation "said first conduit" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collito in view of Knoll.

Collito discloses an elongated conduit 12 comprising a flexible fluid-tight wall having an internal channel with a non-circular cross section and at least two opposed wall members, one with a convex outer surface and an opposed one with a concave outer surface, but does not disclose a polymeric material and a rib/tab.

Knoll (Figure 2A) discloses an elongated conduit 1 comprising a flexible fluid-tight wall having an internal channel with a non-circular cross section and at least two opposed wall members with an axially and radially inwardly extending rib/tab 2 for the purpose of maintaining structural integrity and promoting turbulence for heat transfer.

Since Collito and Knoll are both from the same field of endeavor and/or analogous art, the purpose disclosed by Knoll would have been recognized in the pertinent art of Collito.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Collito a rib/tab for the purpose of maintaining structural integrity and promoting turbulence for heat transfer as recognized by Knoll. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Thus, to employ a conduit composed of a polymeric requires only routine skill in the art.

Regarding claim 20, the flexible conduit 12 of Collito is capable of being inflatable by a fluid, since the conduit was previously deformed.

Regarding claim 21-22, Figure 2 of Collito discloses the first and second walls are arcuate.

Claims 1-16 and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collito in view of Knoll as applied to claims 17-18 and 20-22 above, and further in view of Tremont.

The combined teachings of Collito and Knoll lacks an elongate cover. Note Collito (column 3, lines 10-13) discloses the conduits may be secured in any suitable manner.

Tremont (Figures 6-7) discloses an elongate structure comprising a first conduit 32; one flexible elongated temperature control conduit 22; and an elongated cover 48 holding the temperature control conduit within a cavity onto the first conduit for the purpose of ease of maintenance and assembly.

Since Collito and Tremont are both from the same field of endeavor and/or analogous art, the purpose disclosed by Tremont would have been recognized in the pertinent art of Collito.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Collito an elongated cover for the purpose of ease of maintenance and assembly as recognized by Tremont.

Regarding claim 2, Tremont (column 2, lines 63-66) discloses the elongated cover 48 is impermeable, which is read as “fluid-tight.”

Regarding claim 3, as applied above, to employ a temperature control conduit composed of a polymeric requires only routine skill in the art.

Regarding claims 4-5 and 26, Tremont (column 2, lines 63-66) discloses the flexible elongated cover 48 requires a means 56, 58 for securing to the first conduit 32, and is read as having “no integral or superficial structural reinforcement.”

Regarding claims 6-7, 9-10, 14 and 27-28, the claims are met by Knoll above.

Regarding claims 11 and 29, the Examiner takes Official Notice of sensors for their use in the heat transfer art to monitor and control the working conditions of the heat exchanger and would be within the level of ordinary skill in the art.

Regarding claim 12, Figure 2 of Collito discloses two temperature control conduits 12.

Regarding claims 13 and 31, as applied to claim 20 above, the flexible conduit 12 of Collito is capable of being inflatable by a fluid, since the conduit was previously deformed.

Regarding claims 15-16, as applied to claims 21-22 above, Figure 2 of Collito discloses the first and second walls are arcuate.

Regarding claims 23, 30 and 32, Tremont (column 2, lines 63-66) discloses the elongated cover 48 is composed of flexible layers 50, 52 and has releasable fasteners 56, 58.

Regarding claim 24, the cavity of Tremont above is read as a “pocket.”

Regarding claim 25, the elongated cover 48 of Tremont is read as being "homogenous."

Response to Arguments

Initially, it is noted a typographical error resides in the header of each page of applicant's amendment. The application serial number should be 10/566,639. Fortunately, the cover sheet shows the correct number.

The objection to the drawings under 37 CFR 1.83(a) is withdrawn in view of the amendment to claim 8.

The rejection of claim 8 under 35 U.S.C. 112, first paragraph, is withdrawn in view of the amendment

The anticipatory rejections under Gross are withdrawn in view of the claim amendments.

The rejections under Boling, Williams et al and Sullivan are withdrawn in view of the claim amendments.

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

No further comments are deemed necessary at this time.

Conclusion

THIS ACTION IS MADE FINAL. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is (571) 272-4916. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Leonard R. Leo/
PRIMARY EXAMINER
ART UNIT 3744

July 8, 2010